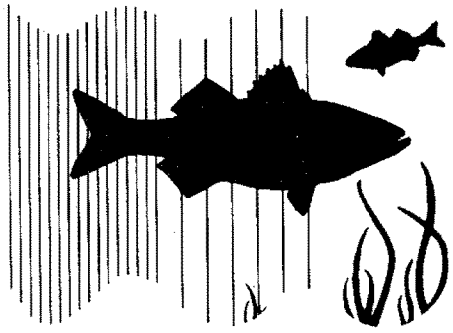

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Comments regarding Perspectives of Cooperating Parties Group (CPG) On Lower Passaic River Restoration Project (LPRRP) Presented to U.S. Environmental Protection Agency Contaminated Sediments Technical Advisory Group (CSTAG) On 13 February 2008

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20 February 2008

"Original Project Focus Has Been Lost"[1]

The Lower Passaic River Restoration Project (LPRRP) was one of the original pilot projects of the Urban Rivers Restoration Initiative (URRI) because the Passaic River Coalition (PRC) advocated for its inclusion. The URRI was never intended to restore the entire Passaic River Basin to the conditions that existed in Pre-Columbian days when the Lenni Lenape Indians were the dominant group of human residents in the watershed. The "vision for the river" was expressed by Ella Filippone of the PRC in a letter to Alan Steinberg of EPA in September 2005. "People want to be able to paddle a canoe or ride on a boat, catch fish, or just enjoy the view of the river. For the two million people that live within one mile of the river, the Lower Passaic should be the place to go for outdoor recreation. However, the contamination of river and shoreline sediments, especially by dioxin, makes cleaning up the river and its shores dangerous. The sediments have gotten so deep that boats get beached. And the fish are too toxic to eat." Most of these two million people would agree that the Lower Passaic River and Newark Bay should be "fishable" and "boatable", but we have not heard calls for them to be "swimmable".

CPG Recommendation 1: Control Sources Early[2]

The principal sediment contaminants that are contaminating the fish are dioxins and PCBs. The source of these contaminants is primarily the fine sediments in the Lower Passaic River and Newark Bay. These contaminants are no longer being added to the river, but they are being stirred up by tidal action. An "early action" project that would

[1] Quote from CPG presentation on 13 February 2008.

[2] US Environmental Protection Agency, Office of Solid Waste and Emergency Response. February 12, 2002. OSWER Directive 9285.6-08, Principles for Managing Contaminated Sediment Risks at Hazardous Waste Sites, Principle #1, page 2.

dredge and remove the fine sediments from the river bed would be the best way to control these sources early. The report on modeling for the evaluation and management of contaminants of concern in water, sediment, and biota in the NY/NJ Harbor Estuary lists the following implications for port and harbor management:[3]

- "Historical sources of most contaminants were much larger than current sources." Most of the contaminants of greatest concern, such as dioxin and PCBs, are no longer getting into the river. Therefore, dredging and removing the contaminants from "legacy sources" that persist in sediments in the Lower Passaic River and Newark Bay should significantly reduce future risks.
- "Of the current sources of contamination, runoff and head-of-tide appear to be dominant for many of the contaminants." The Contamination Assessment and Reduction Project (CARP) analyses indicate that current contaminant inputs from Combined Sewer Overflows (CSOs) and permitted discharges are relatively low. Stormwater runoff does contribute significant loadings of contaminants such as PAHs, and better management of stormwater runoff is needed throughout the region.

Thus, additional information about ongoing sources of contamination will be useful, but there is abundant information that shows that remediating the sediments contaminated from "legacy sources" will be critical for reducing the risks to human and ecologic health. The lesser risks from ongoing sources can then be studied further and addressed.

CPG Recommendation 2: Sound Risk Management Decisions[4]

The CPG recommendations state that uncertainties "must be reduced before early action decisions can be made". There are always uncertainties in the interpretation of data. However, the CPG comments indicate that the CPG consultants have not adequately studied and evaluated the massive amounts of data, interpretations, and modeling that have accumulated over the years. The collection of additional data, as proposed by the CPG and accepted by EPA and partner agencies, will be useful in the future. However, this need not delay the review of the Focused Feasibility Study (FFS), and recommendation and implementation of an Early Action project.[5]

CPG Recommendation 3: Risk Management Goals[6]

The FFS notes that in the Superfund (CERCLA) Cleanup Program cleanup levels are usually not set below background concentrations of the contaminants of concern.[7] The suspended solids that come over the Dundee Dam from the Upper Passaic River to the Lower Passaic River are the most significant source of sediment contaminants of concern, with the exception of 2,3,7,8-TCDD, from outside the Superfund site, which is the Lower Passaic River below Dundee Dam

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[3] HydroQual. 2007. Contamination Assessment & Reduction Project (CARP), Modeling for the Evaluation and Management of Contaminants of Concern in Water, Sediment, and Biota in the NY/NJ Harbor Estuary, Contaminant Fate & Transport & Bioaccumulation Sub-models. July 2007. Page C-3.

[4] US Environmental Protection Agency, Office of Solid Waste and Emergency Response. February 12, 2002. OSWER Directive 9285.6-08, Principles for Managing Contaminated Sediment Risks at Hazardous Waste Sites, Principle #4, page 4 & Principle #6, page 6.

[5] Malcolm Pirnie, Inc. 2007. Lower Passaic River Restoration Project, Draft Source Control Early Action Focused Feasibility Study. Prepared for US Environmental Protection Agency, US Army Corps of Engineers, New Jersey Department of Transportation. June 2007. (FFS).

[6] US Environmental Protection Agency, Office of Solid Waste and Emergency Response. February 12, 2002. OSWER Directive 9285.6-08, Principles for Managing Contaminated Sediment Risks at Hazardous Waste Sites, Principle #7, page 7 & Principle #8, page 7.

[7] FFS, Section 2.4.3, page 2-16.

and its drainage area. Background concentrations of the contaminants of concern were measured in the recently deposited sediments from a core collected from the Upper Passaic River immediately above Dundee Dam in 2007.[8] The Background Concentrations found are reported in the table that follows. "The CERCLA program, generally, does not clean up to concentrations below natural or anthropogenic background levels."[9] The anthropogenic background levels of many of the contaminants in the sediments above Dundee Dam pose unacceptable risks. Nevertheless, it is proposed that these background levels be selected as the Preliminary Remedial Goals (PRGs) for the Early Action project. This selection should make the Early Action project to be proposed capable of being implemented within the near future. Furthermore, we concur that "a separate source control action will need to be implemented above Dundee Dam to identify and reduce or eliminate those background sources."[10] The cooperating agencies in the Lower Passaic River Restoration Project, especially the New Jersey Department of Environmental Protection, should consider what course of action to take in the stretch of river above Dundee Dam to the headwaters. Nevertheless, attainment of the "Background Concentrations" in the sediments below Dundee Dam through an Early Action project would significantly reduce the risks to both human health and biotic health of the Lower Passaic River, Newark Bay and the estuary.

Background Levels of Selected Contaminants in Sediments above Dundee Dam

Sediment Contaminant	*Maximum Concentration in Lower Passaic River (ppb)*	*Background Concentration, Selected Remedial Goal (ppb)*	*Ratio of Maximum to Background*	*Risk Based Remedial Goal (ppb)*	*Ratio of Background to Risk Based Remedial Goal*
Dioxin (2,3,7,8-TCDD)	14	0.002	7,000	0.00027	7
Dieldrin	270	4.3	63	0.02	215
Total DDx (DDT *et al.*)	5,980	91	66	1.58	58
Low Molecular Weight PAHs	1,410,000	8,900	158	552	16
Total PCBs	17,200	660	26	14	47
High Molecular Weight PAHs	1,400,000	65,000	22	1,700	38
Lead	2,200,000	140,000	16	10,606	13
Copper	2,470,000	80,000	31	13,318	6
Mercury	12,400	720	17	2,814	0
Chlordane	210	92	2	72	1

CPG Recommendation 4: Integrate Stakeholder Priorities

The EPA, partner agencies, and the Passaic River Coalition are trying to communicate the "risks and benefits of the range of alternatives" so that stakeholders can make informed decisions.

CPG Recommendation 5: Monitoring[11]

[8] FFS, Sections 2.4.3 and 2.4.4, pages 2-15 to 2-18, including Table 2-6.
[9] FFS, Page 2-18.
[10] FFS, Page 2-18.
[11] US Environmental Protection Agency, Office of Solid Waste and Emergency Response. February 12, 2002. OSWER Directive 9285.6-08, Principles for Managing Contaminated Sediment Risks at Hazardous Waste Sites,

We concur that there should be monitoring before, during and after sediment remediation to assess and document remedy effectiveness. In our judgment the focus on "compliance with sediment PRGs", the "Background Concentrations", is appropriate. To evaluate the impacts on biota we have recommended that benthic invertebrate community surveys, as outlined in Section 11.0 of the Draft Field Sampling Plan, Volume 2, June 2006, be included in the monitoring. Sampling the benthic macro-invertebrates at sample locations just prior to disturbing the sediments for chemical analyses would provide invaluable information linking chemical with biological conditions in the sediments. The data from these samples should be available for comparison with future samples, and can be used to assess the impacts of whatever remediation efforts are undertaken. Some appropriate crab and fish tissue analyses before, during, and after remediation would also provide useful information, especially regarding the advisability of eating fish taken from the Lower Passaic River and Newark Bay.

Overall CPG Recommendation: Focus on River Improvement

The EPA and its partner agencies have been focusing on river improvement by proposing an Early Action project to remediate the contaminated sediments in the Lower Passaic River. This action is critical to reducing risks and restoring the river in order "to increase access to and enjoyment of the River". We hope that the CPG will partner with the PRC, other NGOs, and the river communities to facilitate the implementation of an Early Action project that will remediate the contaminated sediments, and help "with community renewal plans."

Principle #11, page 8.